1867MNRAS..27..271S

On the 31st of March, at 7 P.M., I obtained an exact repetition of the position shown in the sketch taken on Feb. 23rd, at 9 P.M.

In these two drawings the mark usually termed the hour-glass mark, is represented as having just passed the centre of the disk of the planet.

This would give a velocity of revolution to the planet agreeing within 44″ with Beer and Madler's determination.

Mr. Barnes has made sketches corresponding with nearly all my drawings, and agreeing with them in all the general features.

It was also stated by him & Mr Dawes that ♂ has no sensible ellipticity, & Stone agreed

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A Determination of the Coefficient of the Parallactic Inequality, and a Deduction of the Value of the Sun's Mean Horizontal Equatoreal Parallax from the Greenwich Lunar Observations 1848–1866. By E. J. Stone, Esq. (Abstract.)

The longitudes deduced from the observations made near the maximum of the Parallactic Inequality are compared with the tabular longitudes; and (it being assumed that the error in the mean results arises entirely from error in the coefficient of the parallactic inequality) the comparison furnishes a correction to the coefficient in question, and consequently also to the value of the Solar Parallax used in the calculation of that coefficient. The result, as deduced from in all 2075 observations, is that the coefficient of the Parallactic Inequality is = 125″·36; and that the corresponding value of the Solar Parallax is = 8″·850, with a possible error not greater than ± 0″·056 in the parallax, arising from an assumed uncertainty 0″·4 in the theoretic value of the coefficient of the inequality, and an assumed uncertainty of the same amount in the value of the coefficient as obtained from the Observations.

On the Mass of the Moon as deduced from the Mean Range of Spring and Neap Tides at Dover during the years 1861, 1864, 1865, *and* 1866. By H. P. Finlayson, Esq.

The determination is effected by means of the following equation:—

$$(19\cdot192)^2 : (15'\,43''\cdot76)^3 + \frac{(16'\,1''\cdot82)^3}{x} :: (10\cdot939)^2 : (15'\,30'')^3 - \frac{(16'\,1''\cdot82)^3}{x}$$

viz. 19·192 feet is the mean range of the spring-tides for the

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1867MNRAS..27..272S

four years, 10·939 the mean range of the neap-tides; 15′ 43″·76 and 16′ 1″·82 the mean semidiameters of the Moon and Sun respectively at the spring-tides, 15′ 30″ and 16′ 1″·82 the mean semidiameters at the neap-tides; x is the density of the Moon, that of the Sun being taken = 1; the equation gives $x = 2\cdot218$ leading to the value, Moon's mass = $\frac{1}{87\cdot925}$ of the Earth's mass. The values obtained by effecting the determination in the same manner for each of the four years separately are $\frac{1}{89\cdot870}$, $\frac{1}{88\cdot243}$, $\frac{1}{87\cdot943}$, and $\frac{1}{86\cdot000}$ of the Earth's mass.

Errata in Logarithmic Tables of 1849.

By Major-General Shortrede.

In the log. of cub. in. dist. water in grains there is in some copies an obvious error. I have a copy properly corrected, and by some mistake it has been made wrong again.

The following list of Errata in the Log. Tables of 1849 is supplementary to the one given in the January number of 1864, page 68, vol. xxiv. They were omitted to be given along with the others owing to the copy in which they were noted having been mislaid, and out of reach; the unauthorised issue in 1844 contains several others.

Preface p. viii		line	Δ_7	*for* 20200	*read* 20160 ∇_8			
	xvi		16	9426	9428			
							For.	Read.
			18	1670	1672	& in log	8833	8837
			19	7182	7184			
					P_1 p_1		4211	4215
In Tables	31	in log	24451	2996	2966			
	50	Diff. & Mult.	91 × 8	729	728	This correction has been recently communicated by M. Leverrier through the Astronomer Royal.		
Logs	36	log	54033	6541	6591			
	67		67951	1959	1958			
	81		85071	6815	7815			
Antilogs	146		41799	8124	8123	These and the great majority of the errors in the Antilogs formerly noted were communicated by Mr. Gray.		
	178		79689	4512	4552			
	184		86588	3119	3109			
	188		92052	7683	7603			

In the formulæ for Spherical Triangles

Case	Sought		
598 2 sides & ∠ opp.			
	C	*for* cot ξ	*read* cos ξ
	c	$\frac{\cos b \cos \phi}{\cos b}$	$\frac{\cos a \cos \phi}{\cos b}$

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